

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of

Revision of the Commission's Rules
To Ensure Compatibility with
Enhanced 911 Emergency Calling Systems

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CC Docket No. 94-102

**SPRINT CORPORATION
SEVENTH QUARTERLY
E911 IMPLEMENTATION REPORT**

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SUMMARY

Sprint has once again set a new standard for the wireless telecommunications industry. Sprint is now the first and only carrier to have effectively converted 100% of its new handset activations to GPS enabled devices. As of June 28, 2003, 99.5% of all new handset activations from Sprint outlets were GPS enabled, meaning that virtually all customers activating new handsets will now have the equipment necessary to be located in an emergency. Sprint was the first carrier to begin selling GPS enabled devices and was the only carrier to meet the Commission's October 1, 2001 deadline to begin selling such handsets. Sprint has now sold more than 11.6 million GPS enabled handsets to retailers since October of 2001. The following are highlights of Sprint's accomplishments to date:

- Sprint was the first and only carrier to begin selling GPS enabled devices on October 1, 2001.
- Sprint was the first carrier to deploy a handset based Phase II operating system – deploying service covering the entire State of Rhode Island in December of 2001.
- Sprint was the first to complete installation of all the national platforms, switch and cell site upgrades required to support Phase II E911 service across its entire nationwide network on June 14, 2002, more than a month ahead of the FCC's deadline for Sprint. Sprint has been capable of supporting Phase II implementations nationwide for more than a year.
- Sprint now offers twenty different GPS enabled handset models (although older Phase II handsets are being phased out of the current handset lineup).
- Sprint has sold over 11.6 million GPS-enabled handsets since October of 2001.
- Sprint deployed 82 new Phase I PSAPs during the second quarter of 2003, for a total of 1,781 Phase I PSAPs across the United States.
- Sprint deployed 176 new Phase II PSAPs during the second quarter of 2003, for a total of 376 PSAPs in twenty different states.
- Sprint is now averaging more than four Phase I or II PSAP deployments a day.

Although Sprint has met all current FCC mandates, live Phase II deployment efforts continue to face challenges. As noted in previous reports, LEC and PSAP readiness issues continue to impact Sprint's ability to make Phase II services available to its customers. As Sprint has continually advised the Commission, it cannot unilaterally deploy Phase II services.

Sprint is proud of its accomplishments in this area, and will continue to work cooperatively with LECs, PSAPs, vendors, regulatory bodies and public officials to overcome the remaining technical and administrative hurdles faced in E911 deployment.

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**SPRINT SEVENTH QUARTERLY
PHASE II IMPLEMENTATION REPORT**

Sprint Corporation, on behalf of its wireless operating company, Sprint Spectrum L.P., d/b/a Sprint PCS ("Sprint"), submits its Seventh Quarterly Phase II Implementation Report in compliance with the Commission's October 12, 2001 *Sprint Waiver Order*.¹

I. INTRODUCTION

A. Sprint Handset Activation Rate

Sprint has set a new standard for the industry by becoming the first carrier to effectively meet the Commission's 100% new activation requirement. For the week ending June 28, 2003, 99.5% of handset activations from all Sprint controlled outlets were GPS enabled. 93.7% of *all* handset activations, including used handsets, older models and handsets sold through third party outlets, were GPS enabled.² Because reactivations of used handsets are not tracked in the same manner as total gross activations, the exact percentage of GPS enabled new handset activations

¹ See, *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Request for Waiver by Sprint Spectrum L.P. d/b/a Sprint*, 16 FCC Rcd 18330 (2001) ("*Sprint Waiver Order*").

² FCC rules exclude older models and refurbished models from the benchmark calculation. See *Fourth E911 Order*, 15 FCC Rcd 17442, 17455 n.62 (2000) ("The new handset activation benchmarks apply only to new handsets, not to new activations of older model or refurbished handsets.").

(the benchmark measurement) requires separate calculation. A sample study of handset sales for the first two weeks of June showed that approximately 10% of total gross additions were in fact reactivations of previously used handsets. As would be expected, the majority of these reactivated/used handsets were older non-GPS enabled models. Once these handsets are eliminated from total gross activations, as specified under the rules, the GPS enabled new handset activation rate for all outlets, including third party retailers, was 98.13%.

Sprint was the first and only carrier to begin selling GPS enabled handsets by the Commission's original deadline of October 1, 2001. Sprint was also the first carrier to purchase 100% GPS enabled handsets, completing that conversion in December of 2002, and has now sold over 11.6 million GPS-enabled handsets. Sprint has once again demonstrated its leadership role in this area.

Although the Commission's rules are drafted in terms of absolute mathematical percentages, the nature of distribution channels and customer choice prevent such precision in reporting. Various factors will prevent Sprint from being able to certify 100% of all activations are GPS enabled at any specific point. Customers may activate phones that were purchased in the past, but never previously used. Auto manufacturers, for example, have purchased handsets over a year ago for installation in new model cars that are only now being sold to end user customers. Third party distributors also tend to have older inventory that can appear as new non-GPS activations. Sprint cannot refuse to offer service to customers that have purchased these handsets, nor does Sprint have the right to demand that such third parties cease the sale of non-GPS handsets. Nonetheless, the number of handsets at issue is very small in comparison to total activations. For

those activations that remain within its control, Sprint has effectively met the 100% activation benchmark.³

It is worth noting that Sprint has accomplished this feat despite the fact that its competitors have not been required to meet the same accelerated conversion schedule. Verizon Wireless is not expected to meet this milestone until December 31, 2003. Nextel will not complete conversion of its handsets until December of 2004. Smaller carriers, who are frequently providing service in more rural areas, are not even required to *begin* selling GPS enabled handsets until September of this year and will not reach the 100% penetration rate until November 30, 2004.

B. Sprint Phase I & II Deployments

Because the newly imposed FCC reporting requirements have modified the manner in which PSAPs are identified and counted, it is difficult to compare numbers from previous reports with those resulting from the FCC's new excel spreadsheets. Sprint can state, however, that it deployed an additional 82 Phase I PSAPs during the second quarter of this year and an additional 176 Phase II PSAPs. Based upon the FCC's counting conventions, Sprint has now deployed Phase I services for 1,781 PSAPs and has deployed Phase II services for 376 PSAPs.

C. Challenges Beyond Sprint's Control

Phase II deployment continues to face substantial challenges from areas outside of Sprint's control. Many LECs are still unable to pass Phase II data to their PSAPs or are awaiting further cost recovery mechanisms before they permit Phase II services to be deployed. Likewise, many PSAPs face funding or other obstacles to deployment that prevent the service from being

³ A *de minimus* inventory of older model non-GPS enabled handsets does remain in some Sprint stores (less than 1 percent of remaining total Sprint-owned inventory as of July 17, 2003). Sprint is aggressively eliminating even this minimal inventory, however, placing all non-GPS enabled handsets remaining within its control in a closeout sale to be completed by August 10. Even with this small remaining inventory, however, activations from Sprint outlets exceeded 99%.

deployed in their jurisdictions. Indeed, the vast majority of PSAPs have not requested Phase I service, much less the more accurate Phase II service. While Sprint has expended huge amounts of capital to achieve the goals set by the Commission, including the aggressive conversion of its handsets, most of this investment will go unused for the foreseeable future. Indeed, it is likely that a large number Phase II capable handsets sold by Sprint to date will become obsolete and will be discarded before Phase II services are made available.

D. New FCC Reporting Requirements

The Wireless Telecommunications Bureau ("WTB") recently established new guidelines for reporting deployment of enhanced 911 services.⁴ Although these new standards have not yet become effective through Office of Management and Budget approval, Sprint has attempted to provide the information requested in the format posted by the WTB. Unfortunately, the new reporting format has created substantial confusion over naming conventions and the number of PSAPs serving particular jurisdictional boundaries. As a result, Sprint cannot make direct comparisons between the numbers contained in previous reports and the numbers contained in the attached schedule. For example, some PSAPs that Sprint has deployed are not identified on the WTB spreadsheet and other entities identified on the spreadsheet do not appear to be PSAPs. Although Sprint has made its best effort to convert its information to this new format in the limited time permitted, Sprint must advise the Commission that errors are inevitable at this point.

Sprint encourages the Commission to quickly correct the format and contents of the new reporting requirements to permit carriers to provide accurate information and to ensure that the Commission's goal of streamlining and uniformity are achieved. For example, representatives from the State of Massachusetts have indicated to Sprint that there are 268 PSAPs within their

State, but that the Commission's new reporting format does not reflect these. One wireless carrier may report the number of PSAPs contained in the report and another may report the number of PSAPs actually in the state. Similar lack of uniformity may surround how Phase I and II deployments are reflected for the same PSAP. The report format does not provide a location to report two different dates in those instances where Phase I and Phase II were not requested at the same time. Finally, it has been extremely labor intensive to correlate the naming conventions used by the FCC with those used by the states, vendors and other carriers. For these and other reasons Sprint cautions the Commission that carrier efforts to comply with the new reporting format may result in confusion and further PSAP inquiries to the Commission and carriers.

II. CURRENT STATUS OF PHASE I AND II REQUESTS

The *Sprint Waiver Order* specified that this Sprint report "must include information on all pending Phase I and Phase II requests."⁵ Sprint provides this information below.

A. Phase I Status

Sprint has worked cooperatively with PSAPs across the country to deploy Phase I (cell site/sector location) E911 services. It has accommodated Phase I requests regardless of PSAP technology choices and has utilized CAS, NCAS and Hybrid CAS/NCAS (*i.e.*, LEC) solutions. As of August 1, 2003, Sprint is providing Phase I E911 services in 1,781 PSAP jurisdictions, which represents the addition of approximately 82 Phase I systems from last quarter.⁶ Details regarding the status of Phase I requests are contained within Appendix A.

⁴ Wireless Telecommunications Bureau Standardizes Carrier Reporting on Wireless E911 Implementation, Public Notice, DA 03-1902 (June 6, 2003).

⁵ *Sprint Waiver Order* at ¶ 28.

⁶ As noted above, the numbering conventions contained in the WTB reporting requirements makes comparison with earlier reports impossible.

An important component of E911 implementation is open communication with the PSAPs, and Sprint has attempted to keep PSAPs informed of its efforts and status. To Sprint's knowledge, there are no pending complaints against the Company where the installation process was not completed within six months. The Received Date listed in Appendix A indicates the date that Sprint first received the PSAP request, even if the PSAP did not at that time meet the prerequisites of Rule 20.18. Sprint's objective is to deploy Phase I with as many PSAPs as possible. Accordingly, Sprint has not segregated those requests that meet the prerequisites contained in Rule 20.18, but has attempted to move forward on all requests. At the Commission's request, Sprint will provide additional information with respect to specific deployments and PSAP circumstances presented in each case.

B. Phase II Status

Sprint continues to accelerate the pace of Phase II system deployments. Sprint launched 176 new PSAPs in the last quarter bringing total deployments to 376.⁷ Details regarding the status of specific Phase II requests are contained in Appendix A attached hereto.

As previously reported, however, LEC delays have affected the validity of certain PSAP requests and prevented Sprint from deploying all PSAP requests made as of June 30, 2002 by December 31, 2002. In anticipation of that deadline, Sprint contacted each PSAP requesting Phase II service prior to December 31, 2002, and confirmed both their status and a schedule for future action towards deployment. Accordingly, Sprint is operating under an agreed upon schedule with all PSAPs as permitted under the Commission's *Richardson Reconsideration Or-*

⁷ Again, discrepancies between this number and previous reports are the result of the FCC's new numbering conventions.

der.⁸ Once the ALI provider has made the necessary upgrades and permits the transmission of Phase II data, and PSAP readiness is achieved, Sprint will be able to complete work on these Phase II requests.

Sprint has not attempted to segregate Phase II requests based upon validity under the *Richardson Order*, and has moved forward with implementation efforts in all requesting PSAPs. Moreover, Sprint has reached an agreed upon implementation schedule with each of the Phase II requesting PSAPs as permitted under the *Richardson Reconsideration Order* and accordingly, Sprint is in compliance with the Commission's rules regardless of the validity of a given request. To confirm, however, where a PSAP has made a Phase II request, and the ALI provider has not upgraded its ALI database, or prohibits the use of that ALI database contingent upon tariff approval, the PSAP is unable to receive or utilize Phase II information. As Sprint has noted in previous filings, a PSAP will be unable to receive Phase II data unless the necessary ALI and CPE upgrades have been performed.⁹

III. NETWORK READINESS

The *Sprint Waiver Order* specified that this quarterly report contain a statement whether "Sprint has completed its Phase II conversion of all Lucent switching software" by May 30, 2002, and "whether Sprint has completed its Phase II conversion of all Nortel switching software" by August 1, 2002. Sprint not only completed these network upgrades by the FCC's benchmark dates, it completed the required installation of all national platforms and upgrades to

⁸ *In the Matter of Petition of City of Richardson Texas*, Order on Reconsideration, CC Docket 94-102, FCC 02-318, (November 26, 2002) ¶29.

⁹ See Sprint Reply Comments in Support of its Petition for Reconsideration and Clarification, CC Docket No. 94-102 (Jan. 28, 2002).

its network infrastructure ahead of the Commission's schedule. Sprint's entire national network has now been Phase II enabled for more than a year.

A. Lucent Markets

Sprint completed installation of switch software upgrades in all of its Lucent markets on March 6, 2002, almost three months in advance of the Commission's May 30, 2002 deadline.

B. Nortel Markets

Sprint completed installation of switch software upgrades in all of its Nortel markets on June 14, 2002, over a month and a half in advance of the Commission's August 1, 2002 deadline.

IV. CURRENT HANDSET SALES

The *Sprint Waiver Order* specified that this Sprint quarterly report "must also include information on current handset models being activated or sold that are GPS-capable and important events effecting location-capable handset penetration levels, such as introduction of new handset models."¹⁰

Sprint introduced five new GPS enabled models to its handset lineup during the second quarter of 2003 for a total of twenty GPS enabled models. With the exception of an extremely limited amount of older inventory (less than one percent), all new Sprint handset models are now GPS enabled. As of June 28, 2003, 99.5% of all handset activations from Sprint controlled outlets were GPS enabled. As of the end of second quarter 2003, Sprint had sold over 11.6 million GPS-enabled handsets. Sprint has met both the Commission's deadline for interim activation rates and the Commission's deadline for 100% activations.¹¹

¹⁰ *Sprint Waiver Order* at ¶ 28.

¹¹ The FCC's Phase II rules apply to voice capable "handsets", not data centric devices (*e.g.*, laptop computers, air cards and personal digital assistants). As previously advised, Sprint notes that it has in inven-

V. COMPLIANCE WITH OUTSTANDING BENCHMARKS

The *Sprint Waiver Order* specified that this Sprint report “must also contain statements regarding whether Sprint PCS has met each deployment benchmark and, if not, the reasons for its failure to comply.”¹²

Sprint has met all benchmarks passed, to date, including the revised benchmark for compliance with the Commission’s requirement that 100% of new handset activations be GPS enabled by June 30, 2003.¹³ Specifically, Sprint began selling GPS handsets by October 1, 2001. Sprint met the interim benchmark that 25% of handset activations be GPS enabled by July 31, 2002.¹⁴ Sprint completed network upgrades to its Lucent and Nortel switches well before the Commission deadlines of May 30, 2002 and August 1, 2002. The Commission also ordered Sprint to provide service to all PSAPs who had made a valid request on or before June 30, 2002, by December 31, 2002. The majority of requests received prior to June 30, 2002 would be considered invalid under the rules in effect at the time the requests were issued, because the PSAP was unable to receive or utilize Phase II information. The validity of these requests should no longer be an issue, however, because Sprint has reached agreed upon implementation schedules

tory an extremely limited number of non-GPS enabled data-centric devices that offer voice capacity. The technology for these data-centric devices is continuing to develop and the timeline for development of GPS capability is less certain. For this reason, the timeline may differ from the standard handset product line. Sprint will advise the FCC of continuing developments regarding these devices, in its deployment reports and otherwise, as appropriate.

¹² *Sprint Waiver Order* at ¶ 28.

¹³ See, *In the Matter of Request for a Limited and Temporary Rule Waiver by Sprint*, FCC 03-133, Order, CC Docket 94-102 (June 16, 2003)

¹⁴ The Commission’s Waiver Order is ambiguous regarding the manner in which compliance with the July 31, 2002, 25% activation rate was to be calculated. At least one interpretation of the Order is that compliance should be determined based upon the percentage of GPS enabled handsets sold between July 31, 2002 through December 30, 2002. See, Waiver Order, ¶28. Under this interpretation, Sprint exceeded the benchmark by a large margin.

with all Phase II requesting PSAPs as permitted under the *Richardson Reconsideration Order*. Accordingly, Sprint is in compliance with the *Sprint Waiver Order*.

The *Sprint Waiver Order* also directed Sprint to provide a statement regarding the accuracy milestone. The rules provide that handset-based location solutions must provide the location of wireless 911 calls with an accuracy of 50 meters for 67 percent of calls and 150 meters for 95 percent of calls.¹⁵ Measurements taken from its current operating systems indicates that it is meeting the Commission's accuracy requirements.

VI. AFFIDAVIT REQUIREMENT

The *Sprint Waiver Order* specifies that Sprint "must support each Quarterly Report with an affidavit, from an officer or director of Sprint, attesting to the trust and accuracy of the report."¹⁶ Appendix B is the conforming Declaration of Kathy A. Walker, Senior Vice President – Network Services, Sprint.

¹⁵ 47 C.F.R. § 20.18(h)(2).

¹⁶ *Sprint Waiver Order* at ¶ 28.

VII. CONCLUSION

Sprint remains a leader in E911 deployment efforts. Through this report, Sprint provides the Commission with updated information concerning its activities in this important area.

Respectfully submitted,

**SPRINT CORPORATION on behalf of
SPRINT SPECTRUM L.P., d/b/a Sprint PCS**

A handwritten signature in black ink, appearing to read 'Luisa L. Lancetti', is written over a horizontal line.

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